

MBL400S

Omni-Directional Sector Light
Aguilar Point, British Columbia,
Canada



PROJECT OVERVIEW

Mediterráneo Señales Marítimas (MSM) was selected by the **Canadian Coast Guard** to supply a customised **MBL400S Omni-Directional Sector Light** for installation at **Aguilar Point**, British Columbia. The project forms part of the modernisation of Canada's aids to navigation infrastructure, replacing legacy lighting technology, an existing PEL10 and SL155 setup, with an energy-efficient **LED solution** designed for long-term reliability in demanding Pacific coastal conditions.

Located at the entrance to **Barkley Sound**, the installation supports a busy and diverse navigation corridor used by commercial shipping bound for **Port Alberni**, fishing vessels, coast guard, and recreational boaters exploring one of BC's most active cruising and sport fishing destinations

The project demonstrates MSM's growing presence within **Northern Waters markets** and highlights the suitability of the **MBL400S** for demanding coastal environments where reliability, visibility and low maintenance are critical.

THE CHALLENGE

Aguilar Point lies within a navigationally demanding stretch of BC's outer Pacific coast, characterised by:

- ▮ **Dense island and channel geography throughout Barkley Sound**
- ▮ **Numerous islands, channels and inlets**
- ▮ **Strong and variable tidal currents**
- ▮ **Frequent fog and reduced visibility driven by Pacific weather systems**
- ▮ **High vessel traffic spanning commercial shipping, fishing fleets, and recreational craft**
- ▮ **Year-round exposure to open ocean conditions**

The Canadian Coast Guard required a reliable sector light capable of providing clear navigational guidance while reducing maintenance requirements and operating costs associated with traditional lighting technologies.



THE MSM SOLUTION

MSM supplied an customized **MBL400S Omni-Directional Sector Light** configured with white and red sectors to provide precise navigation guidance for vessels transiting the area.

Key features included:

-  Customized dual rhythm (flash), fixed white and quick red flash
-  Up to 12 nautical mile nominal range
-  High-precision sector definition
-  Energy-efficient LED technology
-  Integrated Bluetooth programming and configuration
-  Robust marine-grade construction
-  Low maintenance operation
-  Long service life

REMOTE CONFIGURATION & CONTROL

The **MBL400S** incorporates **MSM's user-friendly Bluetooth interface**, enabling local technicians to configure and monitor the light directly from a mobile device.

Functions available include:

- ▶ Flash character programming
- ▶ Intensity adjustment
- ▶ Battery monitoring
- ▶ Solar charging diagnostics
- ▶ Operational status verification
- ▶ Remote activation and testing

This functionality significantly simplifies maintenance activities and reduces service intervention times.



The installation was commissioned by the **Canadian Coast Guard** and integrated into the existing aids to navigation infrastructure serving the region.



WHY THE MBL400S?

The Canadian Coast Guard selected the MBL400S due to its combination of:

- ▶ Proven LED optical performance
- ▶ Precise sector boundaries
- ▶ Reduced energy consumption
- ▶ Low maintenance requirements
- ▶ Reliability in challenging coastal environments
- ▶ Ease of installation and commissioning

The solution provides a modern alternative to traditional sector light systems while maintaining the accuracy required for safe navigation.



PROJECT BENEFITS

- ▶ Improved Navigational Safety
- ▶ The MBL400S delivers clear sector guidance to vessels operating within a busy and geographically complex coastal environment.
- ▶ Reduced Maintenance
- ▶ LED technology eliminates many of the maintenance requirements associated with conventional light sources while extending service intervals.
- ▶ Energy Efficiency
- ▶ Modern LED optics significantly reduce power consumption while maintaining the required optical performance.
- ▶ Operational Reliability
- ▶ Designed specifically for harsh marine environments, the MBL400S continues to provide dependable operation under challenging weather conditions.

NORTHERN WATERS REFERENCE

This installation further strengthens MSM's growing portfolio of references across Northern Waters markets, including Canada, Iceland, Norway, Sweden, Denmark and Estonia.

Together these projects demonstrate MSM's ability to deliver reliable Aids to Navigation solutions across some of the world's most demanding cold-climate maritime environments

Customer: Canadian Coast Guard

Location: Aguilar Point, Vancouver Island, British Columbia, Canada

Product: MBL400S ODSL

Sectors: White / Red

Technology: LED

Configuration: Bluetooth programming

Replaced: Existing PEL10 / SL155 setup



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